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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/982,486	10/17/2001	Brian D. Cull	H0001856	7456

128 7590 03/15/2004

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EXAMINER

GARLAND, STEVEN R

ART UNIT	PAPER NUMBER
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2125

DATE MAILED: 03/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application N .

09/982,486

Applicant(s)

CULL ET AL.

Examiner

Steven R Garland

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 2/12/02, 11/4/02.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/17/01 and 12 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. Applicant's claim for domestic priority under 35 U.S.C. 119(e) is acknowledged.
2. The drawings are objected to because figures 3,19, and 35-39 lack sufficient margins. Note that when the drawings were entered into the file that due to the insufficient margins that holes have been punched through the drawing figures requiring that drawings with proper margins be submitted. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-6,9-11,13,14,19, 25, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshino et al. ( EPO 0484564A cited by applicant ).

Yoshino et al. teaches mixing paint substances to form a desired color, measuring the color and correcting the mix until the desired color is achieved. Yoshino also teaches measuring the color using chromaticity coordinates, use of a tristimulus colorimeter, use of three or more paints to form the mixture, use of a computer, iteration. See the abstract; figures; col. 2, lines 34-55; col. 3, line 41 to col. 4, line 58; col. 7, lines 22-26; and col. 8, line 41 to col. 9, line 41.

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5. Claims 1-11, 13-15, 19, 25, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Snyder 5,907,495.

Snyder teaches mixing paint substances to form a desired color, measuring the color and correcting the mix until the desired color is achieved. Snyder also teaches measuring the color using chromaticity coordinates, use of a spreadsheet, tristimulus values, use of multiple pigments to form the mixture, use of a computer, iteration, dividing into bands. See the abstract; figures; col. 1, line 60 to col. 2, line 36; col. 2, lines 55-63; col. 3, lines 4-40; col. 6, lines 49-67; col. 8, line 57 to col. 10, line 49; col. 11, lines 45-60; and col. 12, line 14 on.

6. Claims 1-6, 8-11, 13, 14, 19, 22, and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Sherman et al. 4,887,217.

Sherman et al. teaches use of a computer controlled paint mixing system to form a paint of a desired color and if required adjusting the formula until the desired color is achieved. Sherman teaches the use of tristimulus values, three or more pigments; division into bands; iteration; See the abstract; col. 2, line 5 to col. 4, line 36; col. 4, lines 39-62; col. 6, line 35 on.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

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the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1-6, 8-11, 13,14, and 16-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evanicky 6,243,068 in view of Pappalardo 5,854,533.

Evanicky et al. teaches fluorescent lamp design, use of a computer, use of R,G,B phosphor spectral files, use of chromaticity, varying the percentage of R,G,B phosphors, determining if the combination matches the desired criteria, use in a LCD display and back lighting; and use of a spectral file that relates to single type of phosphor. See the abstract; figures; col. 1, lines 13-29; col. 7, lines 46-63; col. 8, lines 57-68; col. 10, lines 10-21; col. 12, lines 55-61; col. 13, line 59 to col. 14, line 16; and col. 19, line 50 on.

Evanicky however generates a pool of candidates of phosphor compositions by varying the composition of the phosphors by predetermined increments and also does not specifically teach use of the device in avionics, but does teach use of the device for general backlighting of a LCD. Evanicky does teach adjusting the compositions to give a proper look and feel in col. 24, lines 1-5.

Pappalardo teaches fluorescent lamp design, use of color coordinates, use of wavelength intervals, blending phosphors, adjusting phosphors to give the desired

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response if the measured response differs from the desired response, and constructing test lamps. See the abstract; figures; col. 1, lines 20-52; col. 2, line 1 to col. 3, line 9; col. 5, line 56 to col. 6, line 37; col. 15, line 45.

It would have been obvious to one of ordinary skill in the art to modify Evanicky in view of Pappalardo and construct test lamps to insure that the measured color matches the desired color and if not adjusting the blend so that the color matches the desired color and the light intensity matches the desired output over the desired wavelength intervals.

Further it would have been obvious to one of ordinary skill in the art to use the fluorescent lamps in an avionics backlighting application for improved operator viewing in view of Evanicky's general teaching.

10. Claims 7,12, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evanicky 6,243,068 in view of Pappalardo 5,854,533 as applied to claims 1-6, 8-11, 13,14, and 16-36 above, and further in view of Sun 6,567,751.

Evanicky et al. teaches fluorescent lamp design, use of a computer, use of R,G,B phosphor spectral files, use of chromaticity, varying the percentage of R,G,B phosphors, determining if the combination matches the desired criteria, use in a LCD display and back lighting; and use of a spectral file that relates to single type of phosphor. See the abstract; figures; col. 1, lines 13-29; col. 7, lines 46-63; col. 8, lines 57-68; col. 10, lines 10-21; col. 12, lines 55-61; col. 13, line 59 to col. 14, line 16; and col. 19, line 50 on.

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Pappalardo teaches fluorescent lamp design, use of color coordinates, use of wavelength intervals, blending phosphors, adjusting phosphors to give the desired response if the measured response differs from the desired response, and constructing test lamps. See the abstract; figures; col. 1, lines 20-52; col. 2, line 1 to col. 3, line 9; col. 5, line 56 to col. 6, line 37; col. 15, line 45.

It would have been obvious to one of ordinary skill in the art to modify Evanicky in view of Pappalardo and construct test lamps to insure that the measured color matches the desired color and if not adjusting the blend so that the color matches the desired color and the light intensity matches the desired output over the desired wavelength intervals.

Further it would have been obvious to one of ordinary skill in the art to use the fluorescent lamps in an avionics backlighting application for improved operator viewing in view of Evanicky's general teaching.

Evanicky and Pappalardo however do not teach the use of a spreadsheet.

Sun teaches the use of a spreadsheet for ease in data input for a composition. See col. 7, lines 43-67; and col. 9, lines 3-22.

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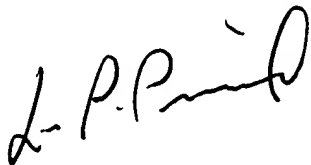
It would have been obvious to one of ordinary skill in the art to modify Evanicky and Pappalardo in view of Sun and allow the use of a spreadsheet to input data. This would allow ease in input of data and also allow ease in modifying data.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Falcoff et al. 4,403,866 is of interest in mixing a desired colored mixture. Johnson 6,608,614 is of interest in backlighting and color adjustment.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven R Garland whose telephone number is 703-305-9759. The examiner can normally be reached on Monday-Thursday from 6:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard, can be reached on 703-308-0538. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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